F.H.W.A. REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	MD			

1

INTERSECTION OPERATION

The intersection of MD 458 (Silver Hill Road), Navy Day Drive and East entrance of the Metro) will operate in a NEMA seven-phase semi-traffic -actuated mode with exclusive eastbound MD 458 double left turn and exclusive westbound MD 458 left turn operating simultaneously and exclusive southbound East entrance of the Metro double left turn operating independently.

Eight phase (fully-actuated) traffic signal controller and system ready base-mounted cabinet, and seven (4) four-channel loop detector amplifiers will be installed at this intersection.

CONSTRUCTION DETAILS

A. Install 27' steel pole with single 42' mast arm with traffic signal heads, pedestrian signal head, 15' lighting arm and luminaire, and signs as shown (NOTE: 2-3" PVC 90 degree angle conduit bends).

B. Install 27' steel pole with 1¼" galvanized conduit and weatherhead for service riser, single 60' mast arm, traffic signal heads, pedestrian signal heads and pushbutton, 10' lighting arm and luminaire, and signs as shown (NOTE: 2-3" PVC 90 degree angle conduit bends and 1-2" PVC schedule 80, 90 degree angle conduit bend).

C. Install 27' steel pole with twin 46' and 64' mast arm, traffic signal heads, pedestrian signal head, 10' lighting arm and luminaire and signs as shown (NOTE: 2-3" PVC 90 degree angle conduit bends).

D. Install 8' pedestal pole with pedestrian signal heads, pushbutton and signs as shown (NOTE: 1-2" PVC 90 degree angle conduit bends). Add 6' extension to 64' mast arm to extend to 70'

E. Install traffic signal controller with control and distribution equipment (see drawing B-14), seven (4) four-channel loop detector amplifiers in base-mounted, system-ready cabinet. (NOTE: 1- 2" PVC 90 degree angle (schedule 80) conduit bend and 2-4" PVC 90 degree angle conduit bends).

F. Install handhole.

G. Install 1" electrical conduit detector wire sleeve.

H. Install 2" schedule 40 electrical conduit-trnched/buried.

I. Install 2" schedule 80 electrical conduit-trenched/buried.

J. Install 2" schedule 80 electrical conduit-pushed under existing pavement.

K. Install 3" schedule 40 electrical conduit-trenched/buried

L. Install 4" schedule 80 electrical conduit-pushed/under existing pavement.

M. Install 4" schedule 80 electrical conduit-trenched/buried.

N. Install 6'x 30' loop detector quadrupole type (2-4-2 turns).

O. Install 6'x 6' loop detector (3-runs).

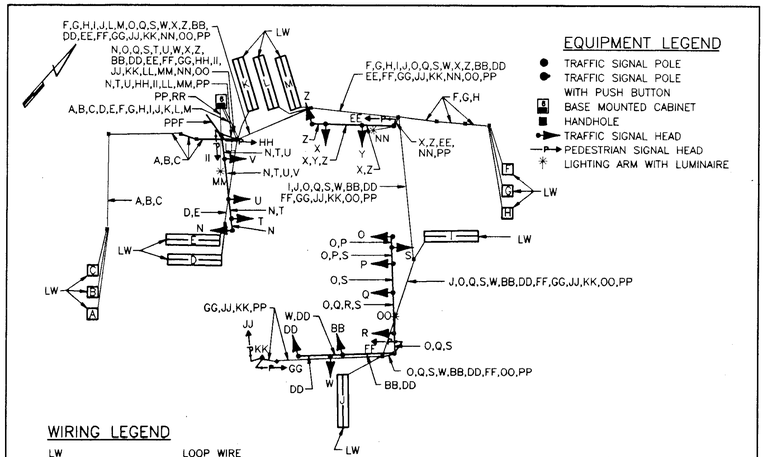
P. Install 24" solid white stop line.

Q. Install pedestrian crosswalk (12" solid white line).

R. Install ground mounted sign.

GENERAL NOTES

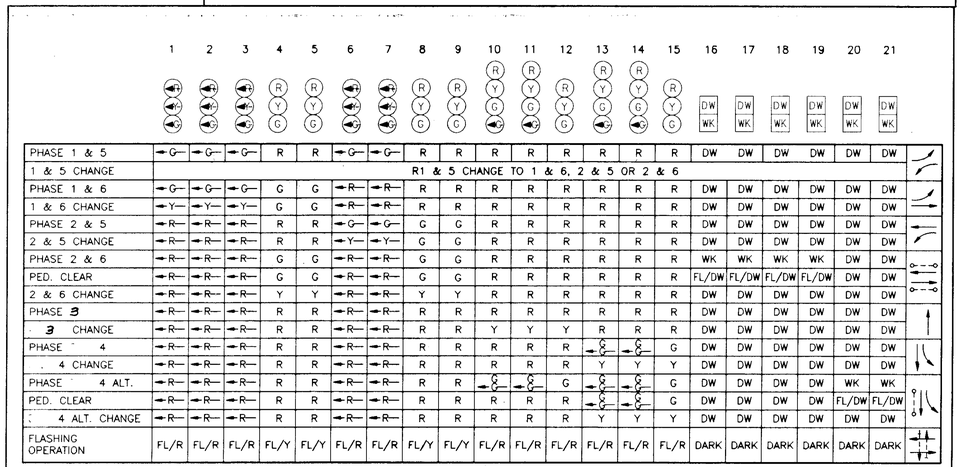
1. Geometrics shall be confirmed prior to the installation of signal equipment.
2. Loop detectors and conduits shall be installed prior to the installation of pavement markings.
3. All utilities are shown in their approximate location and are not to be considered as complete. The contractor shall be responsible for contacting Miss Utility to verify the location of all utilities. The Contractor shall contact the Project Engineer prior to construction if there may be potential conflicts.
4. Pavement markings detailed are proposed and are to be installed by the Contractor in accordance with S.H.A. standards. All others pavement markings will be installed as part of the highway contract.
5. D.O. indicates delay output loop detector.
6. This project shall to be constructed in accordance with latest edition of "Maryland Standard Specification for Construction and Materials" and all addendums thereto.
7. Upon completion of this project, the Contractor shall notify Mr. Robert Snyder at (410) 787-7631 to arrange for the telephone line installation. The Contractor is to provide Mr. Robert Snider with the nearest street address, zip code and phone number.



WIRING LEGEND

LW	LOOP WIRE
A-M	2-CONDUCTOR CABLE (ALUMINUM SHIELDED)
N,Q,S-U,W,Z,BB,DD	7-CONDUCTOR CABLE (NO. 14 A.W.G.)
P,R,V,Y	5-CONDUCTOR CABLE (NO. 14 A.W.G.)
EE-JJ	3-CONDUCTOR CABLE (NO. 14 A.W.G.)
KK,LL	2-CONDUCTOR CABLE (NO. 14 A.W.G.)
MM-OO	2-CONDUCTOR TRAY CABLE (NO. 12 A.W.G.)
PP	GROUND WIRE (NO. 6 A.W.G.)
RR	2 INDIVIDUAL COPPER TYPE THWN (NO. 4 A.W.G.)
PPF	PROPOSED POWER FEED BY PEPCO

WIRING DIAGRAM



PHASE SEQUENCE CHART

SS-05

REVISIONS:	APPROVALS:
3/12/99 1 APPROVED T.S. PLANS PER PCO 67	CHIEF SIGNAL DESIGN SECTION
	ASST. DISTRICT ENGINEER TRAFFIC
	CHIEF TRAFFIC ENGINEERING DESIGN DIVISION
	DIRECTOR OFFICE OF TRAFFIC & SAFETY

RUMMEL, KLEPPER & KAHL
CONSULTING ENGINEERS
81 MOSHER STREET
BALTIMORE, MD 21217
TEL. (410) 728-2900

MDOT – STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION LOG MILE #16045801.07

DRAWN BY: ZAJ
DES. BY: ZAJ
CHK. BY:

MD 458 (SILVER HILL ROAD)
@ NAVY DRIVE
GENERAL INFORMATION
COUNTY: PRINCE GEORGE'S

DATE: SEPTEMBER, 1995 W.M.A.T.A. NO. 1F0091
SCALE: 1"=20' W.M.A.T.A. NO.

TS NO.: 3514-GI-1
SHEET NO. M936-906